

### Abstract of the Disclosure

The present invention provides a memory device for reducing power consumption during a self-refresh operation performed for protecting data loss. For this object, in the present intention, the memory device for performing a refresh operation in a self-refresh period instigated for every constant time interval after entering into a self-refresh mode includes a low-power controller outputting a enable signal for enabling the power supply means during the self-refresh period after being enabled in the self-refresh mode; and a power supply means receiving the enable signal for supplying a low and a high voltages used in an internal circuit by using an external supply voltage and a ground voltage, wherein the low voltage is lower than the ground voltage and the high voltage is higher than the external supply voltage.